

FULL VERSION OF PENDING CLAIMS

1. (Cancelled)

2. (Currently Amended) A method of manufacturing a liquid crystal display panel by a divisional exposure with a plurality of shots including first and second shots adjacent to each other, the method comprising:

preparing a stitch area which is an overlapping area of the first and the second shots at a boundary between the first shot and the second shot, said stitch area including a plurality of unit areas, each unit area being a light-exposed area or a light-blocked area in the first and the second shots; and

determining the positions or the sizes of the light-exposed unit areas or the light-blocked unit areas based on random numbers provided by a random number generator, the number of the light-exposed unit areas or the light-blocked unit areas gradually decreasing or increasing along a direction from the first shot to the second shot, each of the positions of the number of the light-blocked areas or the light-exposed areas in the second shot being opposite to those in the first shot, the randomly positioned light-blocked areas and the light-exposed areas having a distribution that is uniform;

wherein the determination comprises:

determining a pitch of the unit areas;

determining the stitch area including a plurality of unit areas arranged in an N x M matrix, wherein N/M or M/N is a natural number;

determining a moving direction of the first and the second shots, the moving direction comprising one of a left-right direction and an up-down direction;

determining the number of the light-exposed unit areas or the light-blocked unit areas in each row or in each column for the first and the second shots, the number of the light-blocked areas being determined in each column when the moving direction is the left-

right direction, the number of the light-blocked areas being determined in each row when the moving direction is the up-down direction; and

determining positions of the light-exposed unit areas or the light-blocked unit areas in each row or in each column for the first and the second shots using the random number generator,

wherein each generated random number corresponds to the position of a unit area within each row or column.

3. (Cancelled)

4. (Previously Presented) The method of claim 2, wherein the unit area includes a pixel area, a plurality of pixel areas, or a portion of a pixel area.

5. (Currently Amended) A method of manufacturing a liquid crystal display panel by a divisional exposure with a plurality of shots including first and second shots adjacent to each other, the method comprising:

preparing a stitch area which is an overlapping area of the first and the second shots at a boundary between the first shot and the second shot, said stitch area including a plurality of unit areas, each unit area being light-exposed or light-blocked in the first and the second shots; and

determining the positions or the sizes of the light-exposed unit areas or the light-blocked unit areas by a random number generator, the number of the light-exposed unit areas or the light-blocked unit areas gradually decreasing or increasing along a moving direction from the first shot to the second shot, the moving direction comprising one of a left-right direction and an up-down direction, the number of the light-blocked areas being determined in each column when the moving direction is the left-right direction, the number of the light-blocked areas being determined in each row when the moving direction is the up-

down direction, each of the positions of the number of the light-blocked areas or the light-exposed areas in the second shot being opposite to those in the first shot, the randomly positioned light-blocked areas and the light-exposed areas having a distribution that is uniform,

wherein each pixel area comprises two unit areas, and a domain defining member is disposed between the two unit areas.

6. (Previously Presented) The method of claim 5, wherein the pixel area is defined by intersections of two adjacent gate lines and two adjacent data lines and a boundary line between adjacent unit areas extends parallel to the gate lines.

7. (Previously Presented) The method of claim 5, wherein the domain defining member comprises a cutout of the common electrode.

8. (Currently Amended) A method of manufacturing a liquid crystal display panel by divisional exposure, the method comprising:

identifying an overlapping area between a first shot and a second shot, the second shot being adjacent to the first shot, wherein the overlapping area comprises a plurality of unit areas arranged in N rows and M columns;

determining for each row or column a first number of light-exposed unit areas or a number of light-blocked unit areas, wherein said first number decreases for each row or column in a direction from the first shot to the second shot, the direction from the first shot to the second shot comprising a moving direction that is one of a left-right direction and an up-down direction, the number of the light-blocked areas being determined in each column when the moving direction is the left-right direction, the number of the light-blocked areas being determined in each row when the moving direction is the up-down direction;

determining within each row or column the positions of said first number of light-exposed unit areas according to a set of random numbers, wherein each of the positions of the number of the light-exposed areas in the second shot are opposite to those in the first shot, the randomly positioned light-blocked areas and the light-exposed areas having a distribution that is uniform, and wherein said set of random numbers consists of said first number of random numbers.

9. (Previously Presented) The method of claim 8, wherein determining the positions of said first number of light-exposed unit areas comprises identifying a light-exposed unit area corresponding to each random number in said set of random numbers.

10. (Previously Presented) The method of claim 8, wherein said random numbers are generated by a pseudorandom number generator.

11. (Previously Presented) The method of claim 8, wherein  $N/M$  is a positive integer.

12. (Previously Presented) The method of claim 11, wherein said direction from the first shot to the second shot is along a row of said plurality of unit areas, and said first number of light-exposed areas for each column  $m$  is determined as:  $N - [(N/M) \times m]$ , wherein  $m$  ranges from 1 for the column farthest from the second shot, to  $M$  for the column farthest from the first shot.

13. (Previously Presented) The method of claim 8, wherein a pixel area is defined by the intersection of two adjacent gate lines and two adjacent data lines, and a unit area comprises a portion of a pixel area.

14. (Previously Presented) The method of claim 13, wherein the pixel area comprises a domain defining member disposed between adjacent unit areas.

15. (Previously Presented) The method of claim 8, wherein a domain defining member is disposed between two adjacent unit areas.

16. (Currently Amended) The method of claim[[ 14]] 15, wherein the domain defining member comprises a cutout of the common electrode.

17. (New) The method of claim 2, wherein when the moving direction is the left-right direction the number of light-blocked areas for each column  $i$  ( $i = 1, 2, \dots, M$ ) in the first shot is determined to be  $N - (N/M) \times i$ , and the number of light-blocked areas in the second shot is determined to be  $(N/M) \times i$ .

18. (New) The method of claim 2, wherein when the moving direction is the up-down direction the number of light-blocked areas for each row  $j$  ( $j = 1, 2, \dots, N$ ) in the first shot is determined to be  $M - (M/N) \times j$ , and the number of light-blocked areas in the second shot is determined to be  $(M/N) \times j$ .

19. (New) The method of claim 5, wherein when the moving direction is the left-right direction the number of light-blocked areas for each column  $i$  ( $i = 1, 2, \dots, M$ ) in the first shot is determined to be  $N - (N/M) \times i$ , and the number of light-blocked areas in the second shot is determined to be  $(N/M) \times i$ .

20. (New) The method of claim 5, wherein when the moving direction is the up-down direction the number of light-blocked areas for each row  $j$  ( $j = 1, 2, \dots, N$ ) in the first shot is determined to be  $M - (M/N) \times j$ , and the number of light-blocked areas in the second shot is determined to be  $(M/N) \times j$ .

21. (New) The method of claim 8, wherein when the moving direction is the left-right direction the number of light-blocked areas for each column  $i$  ( $i = 1, 2, \dots, M$ ) in the first

shot is determined to be  $N-(N/M) \times i$ , and the number of light-blocked areas in the second shot is determined to be  $(N/M) \times i$ .

22. (New) The method of claim 8, wherein when the moving direction is the up-down direction the number of light-blocked areas for each row  $j$  ( $j = 1, 2, \dots, N$ ) in the first shot is determined to be  $M-(M/N) \times j$ , and the number of light-blocked areas in the second shot is determined to be  $(M/N) \times j$ .

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